DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: HUCKINS POND	Lake Area (ha):	7.24
Town: EFFINGHAM	Maximum depth (m):	1.9
County: Carroll	Mean depth (m):	0.6
River Basin: Saco	Volume (m³):	44500
Latitude: 43°43'20" N	Relative depth:	0.6
Longitude: 71°04'15" W	Shore configuration:	1.99
Elevation (ft): 440	Areal water load (m/yr):	201.8
Shore length (m): 1900	Flushing rate (yr^{-1}) :	327.0
Watershed area (ha): 2501.4	P retention coeff.:	0.08
% watershed ponded: < 0.10	Lake type: natural	w/dam

BIOLOGICAL:	31 January 1992	23 August 1991
DOM. PHYTOPLANKTON (% TOTAL) #	NO PLANKTON SAMPLE	SPARSE PHYTOPLANKTON;
. #	(TOO SHALLOW)	MOSTLY FRAGMENTS OF
#	3	FILAMENTOUS GREEN ALGAE
PHYTOPLANKTON ABUNDANCE (cells/mL		70
CHLOROPHYLL-A (µg/L)		1.61
DOM. ZOOPLANKTON (% TOTAL) #	NO PLANKTON SAMPLE	SPARSE - NO DOMINANTS
#	(TOO SHALLOW)	
#	3	
ROTIFERS/LITER		4
MICROCRUSTACEA/LITER		16
ZOOPLANKTON ABUNDANCE (#/L)		20
VASCULAR PLANT ABUNDANCE		Abundant
SECCHI DISK TRANSPARENCY (m)		1.5
BOTTOM DISSOLVED OXYGEN (mg/L)	13.6	4.8
BACTERIA (fecal col., #/100 ml) #	L	30
#	2	30
#	3	

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None Anoxic volume (m³): None

CHEMICAL: Lake: HUCKINS POND Town: EFFINGHAM						
	31 Janua	1 January 1992		23 August 1991		1
DEPTH (m)	0.5		1.0			
pH (units)	6.4		5.5			
A.N.C. (Alkalinity)	6.7		2.3			
NITRATE NITROGEN	< 0.02					
TOTAL KJELDAHL NITROGEN						
TOTAL PHOSPHORUS	0.010					
CONDUCTIVITY (µmhos/cm)	28.6	-	32.0			
APPARENT COLOR (cpu)	30		240			
MAGNESIUM						
CALCIUM						
SODIUM						
POTASSIUM						
CHLORIDE	< 3		,			
SULFATE	3					
TN : TP						
CALCITE SATURATION INDEX						

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1991

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	4	5	0	9	Meso.

COMMENTS:

- 1. Also known as Hutchins Mill Pond or Wilkinson Brook Pond.
- 2. Nutrient and ion analyses were not completed for the summer survey.
- 3. Water was highly colored.
- 4. Four-wheel drive access road to the pond.
- 5. Wholewater plankton was sparse. Oscillatoria (20%) was the dominant genus while the dominant class was greens (45%).

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FIELD DATA SHEET

LAKE: HUCKINS POND

DATE: 08/23/91

TOWN: EFFINGHAM

WEATHER: MOSTLY SUNNY & WARM

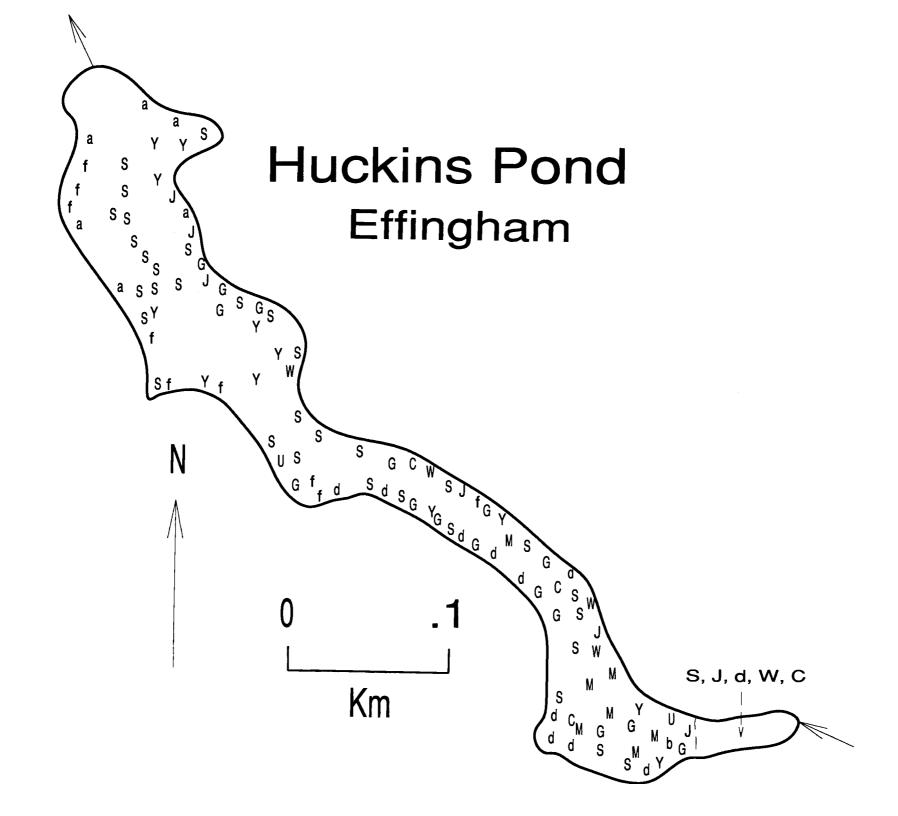
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	20.3	6.4	70 %
0.5	18.0	6.1	64 %
1.0	17.5	5.8	59 %
1.5	17.0	4.8	49 %

SECCHI DISK (m): 1.5 COMMENTS:

BOTTOM DEPTH (m): 1.9

TIME: 1215

*Dissolved oxygen values are in mg/L



AQUATIC PLANT SURVEY

LAK	E: HUCKINS POND	TOWN: EFFINGHAM	DATE: 08/23/91	
Key	PLANT	ADIDIDANGE		
Key	GENERIC	COMMON	ABUNDANCE	
S	Sparganium	Bur reed	Common/Abun	
Y	Nuphar	Yellow water lily	Scattered	
บ	Utricularia	Bladderwort	Sparse	
G	Gramineae	Grass family	Scat/Common	
a	Peltandra virginica	Arrow arum	Sparse	
J	Juncus	Rush	Common	
d	Dulichium arundinaceum	Three-way sedge	Sparse	
f	Chlorophyceae	Filamentous green algae	Scattered	
W	Potamogeton	Pondweed	Scattered	
С	Ceratophyllum demersum	Coontail	Common	
M	MUSCI/HEPATICAE	Aquatic mosses/liverworts	Abundant	
b	Scirpus	Bulrush	Sparse	
I		OVERALL ADDRESS.	3 b d t	

GENERAL OBSERVATIONS:

1. Mosses and liverworts were along the entire bottom -- more widespread than shown on the map. These plants came up on the lead weight throughout the pond while doing the soundings.

OVERALL ABUNDANCE: Abundant